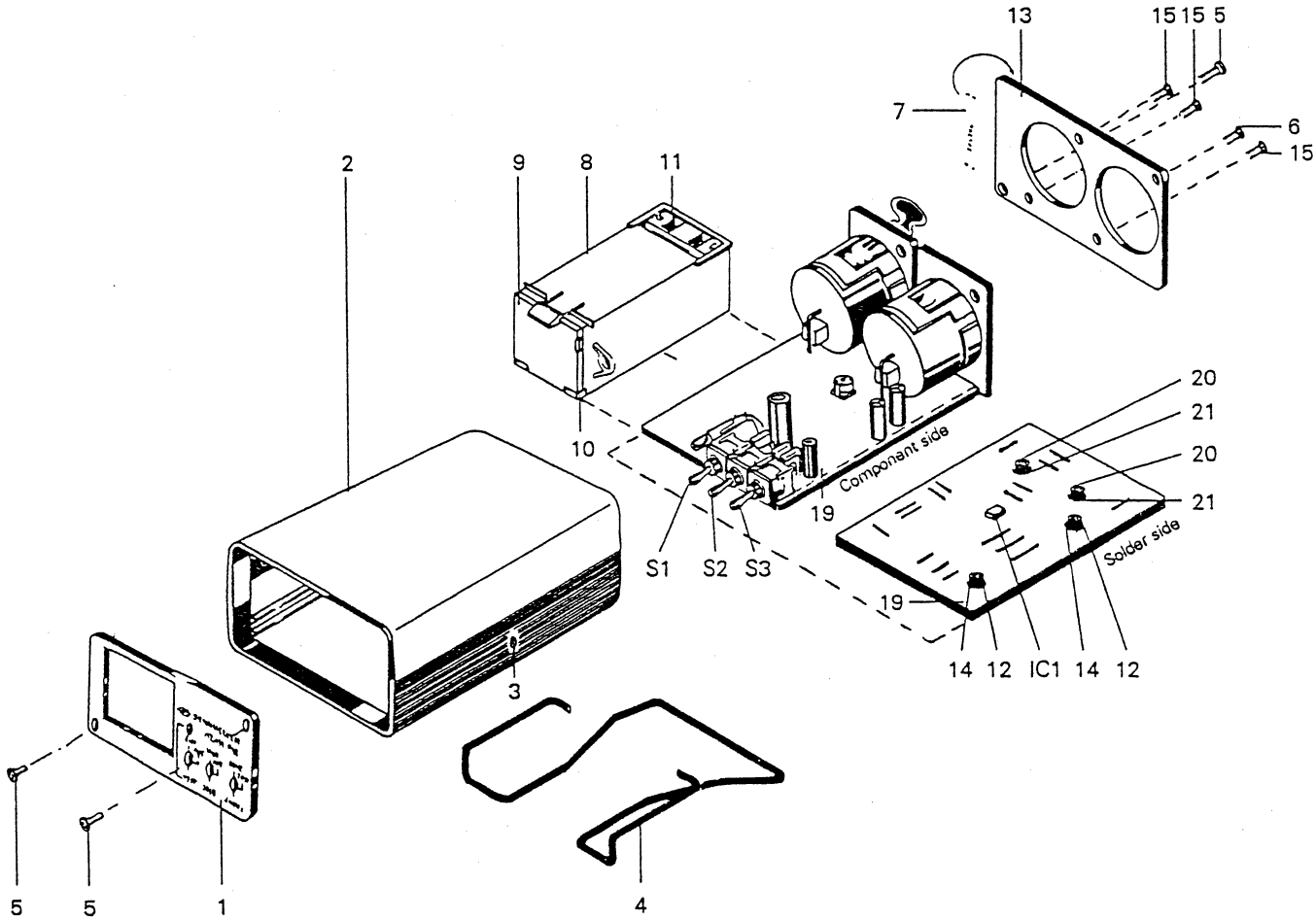
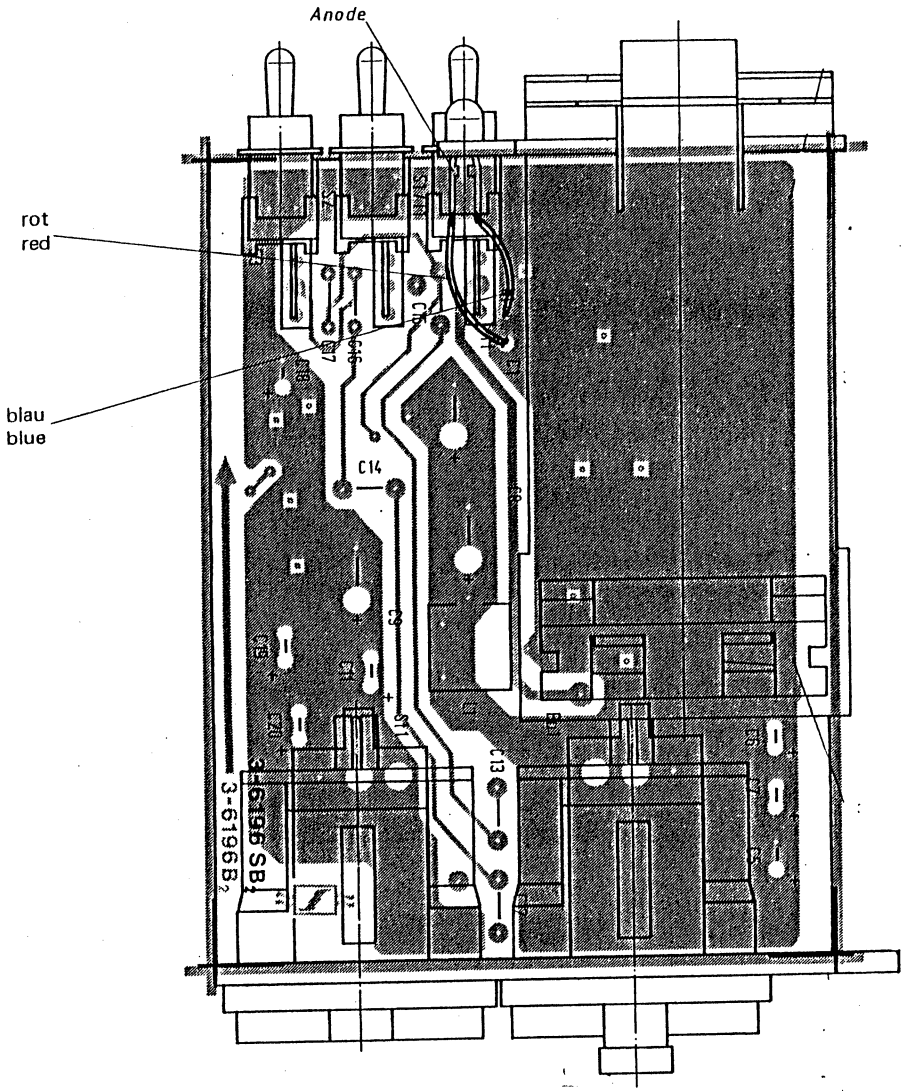
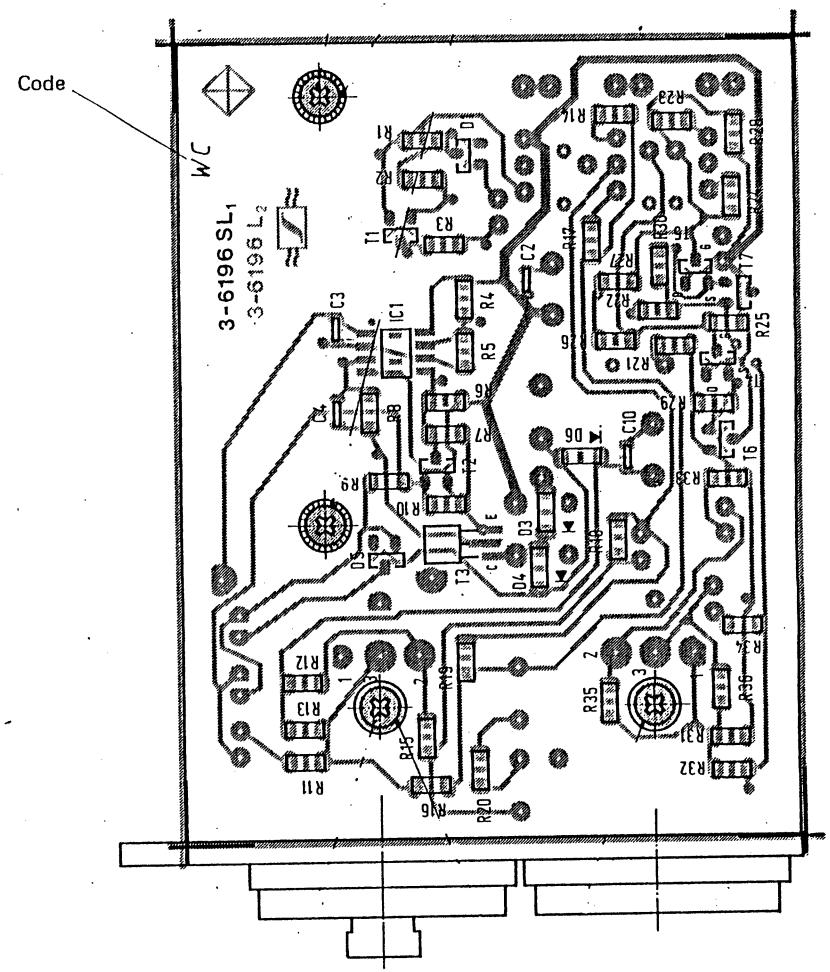

13
15 15 5
7
6
15
2
9
8
11
10
20
21
20
21
Component side
19
S1
S2
S3
Solder side
19
14
12
IC1
14
12
3
5
5
1
4

R 11, R 19, C 11: nur/only MZA 14 TU
R 13, R 18: nur/pnly MZA 14 P 48 U




Bestückungsseite
Equipped side




Lötseite
Foil side

Gedruckte Schaltung MZA 14 TU, MZA 14 P 48 U
Printed circuit board MZA 14 TU, MZA 14 P 48 U

# Ersatzteile/Spare parts

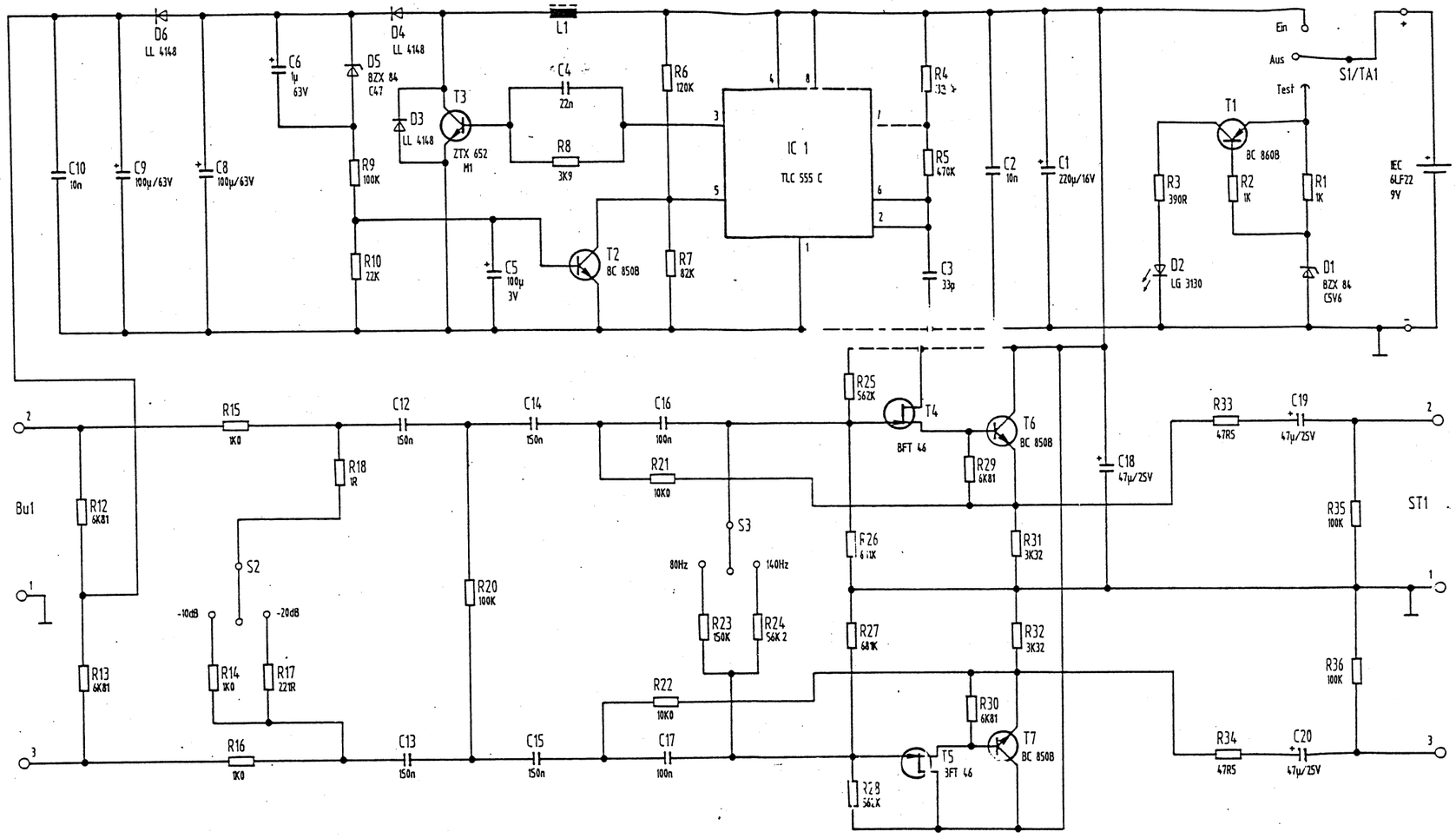
SENNHEISER ELECTRONIC

## 02960 MZA 14 P 48 U

| Pos. | Part no. | Bezeichnung | Designation | PGR |
|---|---|---|---|---|
| 001 | 35180 | Frontplatte | Front panel | 036 |
| 002 | 41993 | Gehäuseprofil mit 2 Buchsen | Housing profile with 2 sockets | 084 |
| 003 | 26508 | Buchse | Socket | 004 |
| 004 | 35182 | Klammer | Clip | 033 |
| 005 | 22996 | Linsen-Schraube M3x6 DIN7985 (MOQ:10x) | Lens screw M3x6 DIN7985 (MOQ:10x) | 001 |
| 006 | 27008 | Senkschraube 3x8 DIN966 (MOQ:10x) | Countersunk screw 3x8 DIN966 (MOQ:10x) | 001 |
| 007 | 27002 | Bezeichnungsschild mit Fabr.-Nr. | Type plate with serial number | 004 |
| 008 | 35183 | Batteriekasten | Battery compartment | 015 |
| 009 | 35184 | Deckel | Cover | 011 |
| 010 | 22393 | Zylinderstift M6x8 DIN7 (MOQ:10x) | Straight pin M 6 x 8 DIN7 (MOQ:10x) | 002 |
| 011 | 35185 | Batteriekontaktierung | Battery contacts | 044 |
| 012 | 26934 | Blechschraube St2,2x6,5 DIN7981 (MOQ:10x) | Sheet metal screw St2.2x6.5 DIN7981 (MOQ:10x) | 002 |
| 013 | 35179 | Abdeckplatte, hinten | Covering plate, rear | 034 |
| 014 | 22866 | Fächerscheibe A2,5 DIN6798 (MOQ:10x) | Lock washer A2.5 DIN6798 (MOQ:10x) | 001 |
| 015 | 22811 | Senkschraube M3x5 DIN966 (MOQ:10x) | Countersunk screw M3x5 DIN966 (MOQ:10x) | 002 |
| 019 | 35187 | Leiterplatte | Printed circuit board | 054 |
| 020 | 26702 | Blechschraube St2,2x4,5 DIN7981 (MOQ:10x) | Sheet metal screw St2.2x4.5 DIN7981 (MOQ:10x) | 002 |
| 021 | 22662 | Scheibe 2,7 DIN433 (MOQ:10x) | Washer 2.7 DIN433 (MOQ:10x) | 001 |
| BU001 | 24199 | Buchse, XLR3-Neutrik | Socket, XLR3 Neutrik | 034 |
| C001 | 19140 | Kondensator AL-ELKO CA 220uF 16V | Capacitor AL-ELKO CA 220uF 16V | 011 |
| C002 | 17648 | SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x) | SMD capacitor KERKO 10nF 50V X7R 0805 (MOQ:50x) | 004 |
| C003 | 28816 | SMD Kondensator KERKO 33pF 50V NP0 (MOQ:50x) | SMD capacitor KERKO 33pF 50V NP0 (MOQ:50x) | 004 |
| C004 | 32118 | SMD Kondensator KERKO 22nF 50V X7R (MOQ:50x) | SMD capacitor KERKO 22nF 50V X7R (MOQ:50x) | 004 |
| C005 | 24560 | Kondensator TA-ELKO 100uF 3V ERO ETQW | Capacitor TA-ELKO 100uF 3V ERO ETQW | 014 |
| C006 | 28533 | Kondensator AL-ELKO 1uF 63V | Capacitor AL-ELKO 1uF 63V | 005 |
| C008 | 24334 | Kondensator AL-ELKO CA 100uF 63V GPF | Capacitor AL-ELKO CA 100uF 63V GPF | 010 |
| C009 | 24334 | Kondensator AL-ELKO CA 100uF 63V GPF | Capacitor AL-ELKO CA 100uF 63V GPF | 010 |
| C010 | 17648 | SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x) | SMD capacitor KERKO 10nF 50V X7R 0805 (MOQ:50x) | 004 |
| C012 | 32941 | Kondensator MKT-KO 150nF 63V | Capacitor MKT-KO 150nF 63V | 009 |
| C013 | 32941 | Kondensator MKT-KO 150nF 63V | Capacitor MKT-KO 150nF 63V | 009 |
| C014 | 32941 | Kondensator MKT-KO 150nF 63V | Capacitor MKT-KO 150nF 63V | 009 |
| C015 | 32941 | Kondensator MKT-KO 150nF 63V | Capacitor MKT-KO 150nF 63V | 009 |
| C016 | 32462 | Kondensator MKT-KO 100nF 50V | Capacitor MKT-KO 100nF 50V | 010 |
| C017 | 32462 | Kondensator MKT-KO 100nF 50V | Capacitor MKT-KO 100nF 50V | 010 |
| C018 | 32116 | Kondensator AL-ELKO CA 47uF 25V | Capacitor AL-ELKO CA 47uF 25V | 010 |
| C019 | 32116 | Kondensator AL-ELKO CA 47uF 25V | Capacitor AL-ELKO CA 47uF 25V | 010 |
| C020 | 32116 | Kondensator AL-ELKO CA 47uF 25V | Capacitor AL-ELKO CA 47uF 25V | 010 |
| D001 | 34471 | SMD Z-Diode BZW84/C5V6 SOT23 | SMD Z diode BZW84/C5V6 SOT23 | 010 |
| D002 | 28539 | LED, grün | LED, green | 013 |
| D003 | 29994 | SMD Diode Mini-MELF LL4148 | SMD diode Mini-MELF LL4148 | 004 |
| D004 | 29994 | SMD Diode Mini-MELF LL4148 | SMD diode Mini-MELF LL4148 | 004 |
| D005 | 34472 | SMD Z-Diode BZX84/C47 SOT23 | SMD Z diode BZX84/C47 SOT23 | 009 |
| D006 | 29994 | SMD Diode Mini-MELF LL4148 | SMD diode Mini-MELF LL4148 | 004 |
| IC001 | 34470 | IC CMOS TLC555 C-S08 | IC CMOS TLC555 C-S08 | 017 |
| L001 | 25816 | HF-Spule | RF coil | 037 |
| R001 | 19465 | SMD Widerstand 1k 5% 1206 (MOQ:50x) | SMD resistor 1k 5% 1206 (MOQ:50x) | 002 |
| R002 | 19465 | SMD Widerstand 1k 5% 1206 (MOQ:50x) | SMD resistor 1k 5% 1206 (MOQ:50x) | 002 |
| R003 | 28688 | SMD Widerstand 390R 5% 1206 (MOQ:50x) | SMD resistor 390R 5% 1206 (MOQ:50x) | 002 |
| R004 | 19507 | SMD Widerstand 33k 5% 1206 (MOQ:50x) | SMD resistor 33k 5% 1206 (MOQ:50x) | 002 |
| R005 | 28833 | SMD Widerstand 470k 5% 1206 (MOQ:50x) | SMD resistor 470k 5% 1206 (MOQ:50x) | 002 |
| R006 | 34458 | SMD Widerstand 120k 5% 1206 (MOQ:50x) | SMD resistor 120k 5% 1206 (MOQ:50x) | 002 |
| R007 | 34457 | SMD Widerstand 82k 5% 1206 (MOQ:50x) | SMD resistor 82k 5% 1206 (MOQ:50x) | 002 |
| R008 | 28689 | SMD Widerstand 39k 5% 1206 (MOQ:50x) | SMD resistor 39k 5% 1206 (MOQ:50x) | 002 |
| R009 | 19470 | SMD Widerstand 100k 5% 1206 (MOQ:50x) | SMD resistor 100k 5% 1206 (MOQ:50x) | 002 |
| R010 | 19506 | SMD Widerstand 22k 5% 1206 (MOQ:50x) | SMD resistor 22k 5% 1206 (MOQ:50x) | 002 |
| R012 | 34462 | SMD Widerstand 681k 1% 0204 (MOQ:50x) | SMD resistor 681k 1% 0204 (MOQ:50x) | 002 |
| R013 | 34462 | SMD Widerstand 681k 1% 0204 (MOQ:50x) | SMD resistor 681k 1% 0204 (MOQ:50x) | 002 |
| R014 | 34461 | SMD Widerstand 1k 1% 0204 (MOQ:50x) | SMD resistor 1k 1% 0204 (MOQ:50x) | 002 |

## 02960 MZA 14 P 48 U

| Pos. | Part no. | Bezeichnung | Designation | PGR |
|---|---|---|---|---|
| R015 | 34461 | SMD Widerstand 1k 1% 0204 (MOQ:50x) | SMD resistor 1k 1% 0204 (MOQ:50x) | 002 |
| R016 | 34461 | SMD Widerstand 1k 1% 0204 (MOQ:50x) | SMD resistor 1k 1% 0204 (MOQ:50x) | 002 |
| R017 | 34460 | SMD Widerstand MELF 221R 1% 0204 (MOQ:50x) | SMD resistor MELF 221R 1% 0204 (MOQ:50x) | 002 |
| R018 | 29182 | SMD Widerstand 1R 10% 1206 (MOQ:50x) | SMD resistor 1R 10% 1206 (MOQ:50x) | 002 |
| R020 | 34464 | SMD Widerstand MELF 100k 1% 0204 (MOQ:50x) | SMD resistor MELF 100k 1% 0204 (MOQ:50x) | 002 |
| R021 | 34463 | SMD Widerstand MELF 10k 1% 0204 (MOQ:50x) | SMD resistor MELF 10k 1% 0204 (MOQ:50x) | 002 |
| R022 | 34463 | SMD Widerstand MELF 10k 1% 0204 (MOQ:50x) | SMD resistor MELF 10k 1% 0204 (MOQ:50x) | 002 |
| R023 | 34465 | SMD Widerstand MELF 150k 1% 0204 (MOQ:50x) | SMD resistor MELF 150k 1% 0204 (MOQ:50x) | 002 |
| R024 | 33233 | SMD Widerstand MELF 562k 1% 0204 (MOQ:50x) | SMD resistor MELF 562k 1% 0204 (MOQ:50x) | 002 |
| R025 | 34466 | SMD Widerstand MELF 562k 1% 0204 (MOQ:50x) | SMD resistor MELF 562k 1% 0204 (MOQ:50x) | 002 |
| R026 | 34467 | SMD Widerstand MELF 681k 1% 0204 (MOQ:50x) | SMD resistor MELF 681k 1% 0204 (MOQ:50x) | 002 |
| R027 | 34467 | SMD Widerstand MELF 681k 1% 0204 (MOQ:50x) | SMD resistor MELF 681k 1% 0204 (MOQ:50x) | 002 |
| R028 | 34466 | SMD Widerstand MELF 562k 1% 0204 (MOQ:50x) | SMD resistor MELF 562k 1% 0204 (MOQ:50x) | 002 |
| R029 | 34462 | SMD Widerstand 681k 1% 0204 (MOQ:50x) | SMD resistor 681k 1% 0204 (MOQ:50x) | 002 |
| R030 | 34462 | SMD Widerstand 681k 1% 0204 (MOQ:50x) | SMD resistor 681k 1% 0204 (MOQ:50x) | 002 |
| R031 | 33232 | SMD Widerstand MELF 3k32 1% 0204 (MOQ:50x) | SMD resistor MELF 3k32 1% 0204 (MOQ:50x) | 002 |
| R032 | 33232 | SMD Widerstand MELF 3k32 1% 0204 (MOQ:50x) | SMD resistor MELF 3k32 1% 0204 (MOQ:50x) | 002 |
| R033 | 34459 | SMD Widerstand 475k 1% 0204 (MOQ:50x) | SMD resistor 475k 1% 0204 (MOQ:50x) | 002 |
| R034 | 34459 | SMD Widerstand 475k 1% 0204 (MOQ:50x) | SMD resistor 475k 1% 0204 (MOQ:50x) | 002 |
| R035 | 34464 | SMD Widerstand MELF 100k 1% 0204 (MOQ:50x) | SMD resistor MELF 100k 1% 0204 (MOQ:50x) | 002 |
| R036 | 34464 | SMD Widerstand MELF 100k 1% 0204 (MOQ:50x) | SMD resistor MELF 100k 1% 0204 (MOQ:50x) | 002 |
| S001 | 34455 | Kippschalter | Toggle switch | 044 |
| S002 | 34456 | Kippschalter | Toggle switch | 043 |
| S003 | 34456 | Kippschalter | Toggle switch | 043 |
| ST001 | 24204 | Einbaustecker | Socket | 033 |
| T001 | 32468 | SMD Transistor BC860B SOT23 | SMD transistor BC860B SOT23 | 004 |
| T002 | 32467 | SMD Transistor BC850B SOT 23 | SMD transistor BC850B SOT23 | 004 |
| T003 | 34468 | Transistor ZTX652/M1 | Transistor ZTX652/M1 | 016 |
| T004 | 34469 | N-Kanal FET BFT46 SOT23 | N channel FET BFT46 SOT23 | 022 |
| T005 | 34469 | N-Kanal FET BFT46 SOT23 | N channel FET BFT46 SOT23 | 022 |
| T006 | 32467 | SMD Transistor BC850B SOT 23 | SMD transistor BC850B SOT23 | 004 |
| T007 | 32467 | SMD Transistor BC850B SOT 23 | SMD transistor BC850B SOT23 | 004 |
| TA001 | 34455 | Kippschalter | Toggle switch | 044 |


D6 LL 4148
D4 LL 4148
L1
C6 1µ 63V
D5 BZX 84 C47
C4 22n
R6 120K
R4 33K
Ein
Aus
S1/TA1
Test
T1 BC 860B
IEC 6LF22 9V
D3 LL 4148
T3 ZTX 652 M1
R8 3K9
IC 1 TLC 555 C
R5 470K
C2 10n
C1 220µ/16V
C10 10n
C9 100µ/63V
C8 100µ/63V
R9 100K
R3 390R
R2 1K
R1 1K
D2 LG 3130
D1 BZX 84 C5V6
R10 22K
C5 100µ 3V
T2 BC 850B
R7 82K
C3 33p
R25 562K
T4 BFT 46
T6 BC 850B
R33 47R5
C19 47µ/25V
R15 1K0
C12 150n
C14 150n
C16 100n
R21 10K0
R29 6K81
C18 47µ/25V
R18 1R
Bu1
R12 6K81
S3
80Hz
140Hz
R26 6K12
R31 3K32
R35 100K
ST1
S2
-10dB
-20dB
R20 100K
R23 150K
R24 56K2
R27 68K
R32 3K32
R13 6K81
R14 1K0
R17 221R
R22 10K0
R36 100K
R30 6K81
T7 BC 850B
R34 47R5
C20 47µ/25V
R16 1K0
C13 150n
C15 150n
C17 100n
T5 BFT 46
R28 56K

| | | |